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November 7, 2002

Via hand delivery

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: WCB Docket No. 01-338

Dear Ms. Dortch:

On November 7, 2002, Praveen Goyal and Jason Oxman of Covad Communications met with Simon Wilkie and Barbara Cherry, with the Office of Plans and Policy, to discuss the Triennial Review proceeding. Covad's points are summarized in the attached presentation.

Respectfully submitted,

A handwritten signature in dark ink, appearing to read "Florence Grasso".

Florence Grasso

Cc: Simon Wilkie
Barbara Cherry



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Covad Communications

Triennial Review *ex parte*

Office of Plans and Policy

November 7, 2002

Jason Oxman

Praveen Goyal

Covad fulfills the promise of the 1996 Act

- Facilities based network deployment (DSLAMs, routers, ATM equipment) in nearly 2000 central offices -- reaching 45% of the country in 35 states.
- Covad utilizes *only* the core of the ILEC bottleneck -- the ILEC transmission grid (loops and interoffice transport) -- exactly what Congress and the Commission intended.
- Covad is the *only* nationwide option for residential ISPs (ILECs don't want to serve independent ISPs -- see BOC Broadband NPRM comments).
 - Wholesale ISPs: AOL, Earthlink, AT&T, dozens of others.
- Covad is the *only* nationwide option for small business DSL (ILECs don't offer SDSL business class DSL services).
 - Wholesale carrier customers: Sprint, SBC, AT&T, WorldCom.
- The only force leading broadband prices *down* -- Covad leads with residential broadband at \$21.95.



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What evidence is on the record of change since the *UNE Remand Order*?

- **Loops** are still bottlenecks, cannot be economically or technically duplicated, regardless of what service is offered over the loops, or what material the loops are made of. Nothing on the record supports any changes to the Commission's current loop rules.
- **Lineshared loops** are still the only way to serve the residential/SOHO DSL market. Nothing on the record challenges the economic or technical impossibility of serving residential/SOHO customers over stand-alone loops. No evidence on the record that CLECs are not impaired without lineshared loops.
- **Interoffice transport** is not available from alternate providers. Collocated fiber providers link COs with downtown office buildings, not other COs. Not a single piece of evidence on the record that COs are linked to one another by CLECs.
- **OSS** is vital for pre-order loop makeup info, ordering, provisioning, billing, repair. Nothing on the record supports eliminating OSS.



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How to address *USTA v. FCC* on linesharing.

- *USTA* court is not predisposed against linesharing -- if it were, it wouldn't have bothered to remand the linesharing decisions to the FCC for reconsideration, and it wouldn't have stayed its decision.
- *USTA* court specifically *upheld* Commission conclusion that linesharing is a network element.
- As the Broadband NPRM and SBC Dom/NonDom proceedings reveal, Covad could soon be the *only* DSL carrier providing service to non-BOC ISPs. Linesharing is more important than ever.
- In order to justify the preservation of linesharing, the Commission needs to address the specific issue raised by *USTA*:
- (1) whether the existence of a cable modem retail broadband service means that CLECs are not "impaired" without access to lineshared loops, and
- (2) whether the broader competitive goals of the Act are met by requiring unbundling of lineshared loops.

CLECs are still impaired without access to lineshared loops

- The Commission's conclusions underlying the adoption of linesharing are not challenged on the record in the Triennial Review.
- 'Carriers seeking to deploy voice-compatible xDSL-based services cannot self-provision loops.' Linesharing Order at para. 37.
 - CLECs still cannot duplicate the ILECs' nationwide loop plant.
- "Requiring that competitors provide both voice and xDSL services, or none at all, effectively binds together two distinct services that are otherwise technologically distinct. Such bundling . . . will drive investment away from the provision of advanced services." Linesharing Order at para. 56.
 - Particularly in this capital environment, DSL providers cannot afford the hundreds of millions of dollars needed to deploy nationwide voice architectures.
- No BOC submitted a supportable claim on the record to be suffering economic harm or deterred from innovation because of unbundling of line shared loops.



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Covad cannot compete without access to lineshared loops.

- ADSL is designed to operate on upper frequencies of voice loop. Any ADSL deployment other than lineshared is technically, economically, and practically infeasible.
- No other provider of transmission facilities available to Covad.
- Consumers will not suffer through two installs (loop plus Covad install) and will choose BOC self-install via linesharing.
- Install interval of less than 10 days for linesharing versus 20 days for standalone loop.
- Customer cannot talk and surf on the same line -- new facility (if available) must be installed.
- Covad could not maintain technician force to install huge volume of consumer lines, while BOCs need no technicians because of self-install.
- Consumer price point provides insufficient revenue to support purchase of standalone loop.



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BOCs all market their retail DSL services based on the advantages of linesharing.

- **Verizon**: "Now you can log on to the Internet and talk on the phone at the same time."
http://www22.verizon.com/foryourhome/dsl/whatisdsl/NLF_WhatIsDSL.asp.
- **SBC**: "Use your existing telephone line. Make phone calls, send and receive data on the same line."
<http://www.pacbell.com/affinity/san/l,,24,00.html?SRC=http%3A%2F%2Fsw51%2Esb%2Ecom%2Fctrk%2Fp%2Egif%3F&EI=20020716210134C&E=L&CI=&UI=&EL=&TI=&RI=&RD=>.
- **Qwest**: "Talk on the phone and surf the Internet at the same time. No need to purchase an additional telephone line."
<http://www.qwest.com/residential/products/dsl/index.html>.
- **BellSouth**: "The service lets you send data and voice over the same line so you can talk or fax while you surf."
http://www.fastaccess.com/consumer/blsc_whatisdsl.jsp.



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Cable modem under the “impair” test of 251(d)(2).

- Existence of cable modem in a market does not alleviate impairment, because:
 - CLECs do not have access to cable transmission plant because the FCC’s rules do not require it, and the cable companies do not voluntarily provide it. Therefore, lineshared loops remain the only possible transmission facility for CLEC consumer/SOHO DSL services.
 - Even if CLECs did have access to cable transmission services, the service CLECs “seek to provide” (DSL) cannot be provided over cable plant, because DSL simply does not work over cable frequencies;
 - Local loops, including the upper frequencies of loops, remain a monopoly bottleneck facility that must be unbundled, regardless of the existence of a similar-appearing retail service to DSL. Mere fact that cable companies have a 4 year head start in the broadband market, and thus have a lead on subscriber count (a lead that is rapidly diminishing) does nothing to impact statutory impairment analysis.



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Broader policy goals of the Act: Broadband deployment and adoption exploded since 1999.

- According to FCC and company statistics, 115,000 DSL lines in service at end of 1999, before Linesharing Order was implemented.
- According to FCC and company statistics, over *six million* DSL lines in service at the end of 3Q 2002, a mere three years later.
- DSL is rapidly gaining on cable modem. Since June 2001, coaxial cable lines in the total high-speed line category have risen 36.2 % while DSL lines have increased by 46.6%.
- California: The California Public Utility Commission's ("CPUC") own statistics (April 2002) indicate that in California, there are 735,677 (ADSL lines (provide by both ILECs and CLECs) and 609,174 cable lines in service. By these figures, DSL technology is now used to serve 57% of the broadband market in California.
 - California is perfect test state, because DSL deployment by CLECs is most mature in California (Covad deployed there first).



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BOCs do not respond to cable modems. They respond to CLEC DSL.

- During the thirteen-month period October 1996 through November 1997, launch of cable modem services by Time Warner, Cablevision Systems, Media One and Adelphia in Bell Atlantic footprint. In the same time frame, only one CLEC, Votts Network, deployed DSL services in a single Bell Atlantic state. Bell Atlantic had no competitive response to these cable entrants throughout this period.
- By contrast, beginning in March 1998, DSL services were launched in the Bell Atlantic states by Covad, HarvardNet and NorthPoint. In response, Bell Atlantic now decided to announce its InfoSpeed DSL service in June 1998 and to rollout its own DSL services in Washington DC and in Pittsburgh beginning in October 1998.
- The timeline clearly establishes two facts with respect to broadband competition in DSL services. First, when faced with multiple competitive entry by cable modem providers, ILECs do not react with competitive alternatives of their own. Second, when faced with multiple competitive entry by non-ILEC DSL providers, the ILECs respond quickly and in multiple markets.

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BOCs will not deploy DSL absent competitive pressure from CLECs, because they prefer second line and T-1 revenue.

- Dial-up access grew popular in the mid to late-1990s when ILEC annual access line growth nearly reached annual double-digit rates.
 - Bell Operating Companies reported 120,909,662 pre-subscribed access lines in 1996 while, in the same year, all carriers reported 135,122,838 analog main access lines. By 1998 however, the Bell companies were reporting 138,488,145 loops (an increase of 17.6 million lines or more than 14.5%). In the same year, all telephone carriers now reported 143,728,291 analog main access lines (an increase of 8.6 million lines of 6.4%). Much of this profitable growth in ILEC access lines was clearly driven by the emerging demand for dial-up access to the Internet during this time frame.
- In more recent years, with the introduction of competitive broadband technologies by cable television providers and by CLECs, consumer demand has begun to shift away from narrowband dial-up access and in favor of broadband access to the Internet. This evolution in the market has tended to reduce ILEC access line growth relative to years past. From 1998 to 2000, analog main access lines reported by all carriers have increased by only 1,696,660 lines or 1.1%. Thus far in 2002, all four BOCs have posted negative access line growth.



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BOCs will not lower prices absent competitive pressure

- Covad's TeleSurfer Link product, priced at \$21.95 for the first four months, and \$39.95 thereafter, with free equipment and installation and no annual contract, utilizes lineshared loops to provide affordable broadband services.
 - Shortly after Covad announced its recent pricing decreases (June 2002), SBC began moving in Covad's direction, although not quite as far. SBC's new pricing (announced just weeks ago) is \$29.95 for the introductory months, then \$42.95 per month thereafter, and SBC's services require a one year contract. SBC's new product offerings are a clear competitive response to Covad's price reductions, and consumers are the beneficiaries.
 - Similarly, Verizon announced just last month that it would begin offering lower prices for its DSL services (\$39.95 per month in exchange for an annual contract). Before the FCC adopted linesharing rules in 1999, Verizon's DSL retail services were priced at \$69.95 per month. Verizon clearly felt no competitive pressure from cable modem services (which had been in service for years by the time Verizon launched its own DSL services), and only began lowering prices (first to \$49.95, then to \$39.95) as CLEC DSL services expanded.



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ILEC investment incentive hypothesis is false

- The BOC Investment Deterrence Hypothesis argues essentially that the unbundling and/or sharing of ILEC facilities and the leasing of those facilities at TELRIC derived prices discourages new investment by the ILECs. Allegedly the ILEC incentive to invest is reduced because, with unbundling and/or line sharing, future ILEC investments will be less profitable than they would otherwise be.
- Proponents of the Investment Deterrence Hypothesis remain silent with respect to the status quo. They offer no proof to support the counter-intuitive claim that somehow, absent competitive pressure, the incumbents will nonetheless cut prices and introduce new products and services in telecommunications markets anywhere.
- The ILEC witnesses do not even attempt to defend the status quo because in numerous telecommunications markets, including the specific market for broadband Internet access, there is no real defense they could offer. There, markets are highly concentrated and both history and economic theory agree that such markets produce high prices, low output and a lack of innovation.

ILEC investment deterrence argument does not apply to loop facilities.

- Absent line sharing, there is little reason to believe that future ILEC investment in DSL equipment would even remotely approach the investment levels that would be required if the ILECs were compelled to compete vigorously with CLECs in broadband markets. Competition not only lowers prices, it enlarges markets and larger markets in turn require increased investment.
- Furthermore, even assuming the counter-intuitive claim of the ILECs that, absent line sharing, they would dramatically increase their investments, their claim clearly makes little sense in the specific case of the shared, high frequency portion of existing loops. For existing loop facilities, there is no new or incremental investment to be discouraged. In existing ILEC loops, it is only the high frequency portion of the loop that now lies unused (and ready to be shared). The loop itself already both exists and generates substantial revenue for the ILEC.
- Even where loops are upgraded to fiber/copper plant, such upgrades are undertaken to reduce maintenance expenses for voice loops, and pay for themselves, according to the BOCs



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Wireless not yet a substitute

- The Commission reports 194,897 satellite or fixed wireless broadband lines (18% of residential and small business high-speed lines) in place to serve residential and small business subscribers.
- It is not clear what percentage of these totals represents fixed wireless services and what percentage represents satellite services. Nevertheless, even on a combined basis, the two technologies account for well under 2% of the total and residential/small business broadband Internet access markets in the United States.
- Fixed wireless (Teligent, Winstar, AT&T Project Angel, WCOM MMDS) all fizzled.

Satellite not a substitute

- Actual commercial value of current (Ku-band) satellite broadband service offerings is limited. Echostar/Hughes themselves characterized the current broadband offerings as "...expensive 'niche' products that are hampered by several constraints, do not even satisfy the Commission's definition of an 'advanced service' and have attracted fewer than 150,000 subscribers combined." Echostar/Hughes concluded that "Satellite broadband today is not fully comparable to cable modem and DSL..."
- In its EchoStar Order the Commission considered Ka-band future deployment and concluded: "Applicants' position that the merger will result in increased deployment of satellite broadband services is based primarily on the projected provision of broadband Internet services using Ka-band spectrum. Such services, however, are not only nascent, in nearly every case they are months, if not years away from public availability. The facilities to deploy broadband Internet access service using Ka-band spectrum are not yet deployed. Substantial uncertainties remain as to the likely quality and prices of such services."
- In sum, Commission concluded that "broadband Internet access services are "...predominantly provided by cable operators using cable modem technology, and secondarily by telecommunications carriers using DSL."



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Covad ADSL vs Cable

Covad ADSL

Cable Modems

Bandwidth

✓ Covad ADSL is a dedicated service. End users do not share bandwidth & connection speeds are consistent.

✗ Cable bandwidth is shared by all end users in a given area. Leads to performance degradation during peak hours.

Security

✓ Covad gives end users a dedicated connection to lessen security risks.

✗ Shared bandwidth raises security concerns. Information theft & electronic snooping can occur.

Business Usage

✓ Covad's TeleSoho service is provisioned with a fixed IP address which facilitates hosting, videoconferencing & VPN capabilities.

✗ Most cable providers do not provide static IP addresses.

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Covad ADSL vs Phone Company DSL

Covad ADSL

ILEC xDSL

Installation Kit	✓ Covad's award winning self install kits have most end users connected in <20 minutes.	✗ Phone company installation experience consistently ranks below Covad experience.
Installation Process	✓ Covad installs most ADSL orders in <10 days.	✗ Average Phone company install time can be 30+ days.
Options	✓ Covad can offer IDSL to end users that don't qualify for ADSL services.	✗ Phone companies offer end users no alternatives if they cannot get ADSL.
Coverage	✓ Covad provides DSL nationwide and is available to 40% of US residential customers.	✗ Phone companies are regional providers that cannot provide nationwide service.

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Loop Unbundling:

Remote Terminal-fed loops

Remote Terminal-fed loops

- The Commission has properly concluded that the loop is a bottleneck facility -- impossible to duplicate -- whether it is made of copper, a mix of copper and fiber, or all fiber.
- Fiber-fed loops are the product of the most efficient voice network plant deployment -- ILECs use RT-delivered loops even in the absence of DSL.
- ILEC “upgrades” of RTs use existing copper, fiber, remote terminals, rights of way, etc. The only new addition to the loop is a new RT line card/OCD port.
- Addition of loop electronics call for a new means of providing unbundled access to the loop -- the BOC-proposed “Broadband Service” is the right direction for the Commission, but as with all other loops, it must be a UNE.
- Because RT-delivered loops must be unbundled, the only issue to resolve is how to price the “new” component of the loop -- the RT line card/OCD port.



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Verizon's July 16, 2002 Barr letter/SBC's Sept. 4, 2002 Daley letter provide RT loop unbundling roadmap

- The question is not whether access should be granted to fiber-fed loops (it should), but how to price the RT line card/OCD port.
- Verizon and SBC provide the details on how this can be handled within the existing TELRIC methodology:
 - “First the Commission should further clarify the appropriate calculation of the cost of capital.” Barr Letter at 2.
 - “The Commission should clarify that states should apply accurate and reasonable economic depreciation lives used for financial reporting purposes in TELRIC pricing models.” Daley Letter at 3.
 - “Second, the Commission should further clarify the appropriate treatment of depreciation.” Barr Letter at 2.
 - “While SBC’s cost of capital is not currently before the Commission, the Commission should make clear that the heightened risk in today’s environment must be taken into account in establishing a cost of capital for use in any TELRIC proceeding.” Daley Letter at 4.
- Covad agrees with the BOCs advocacy that an end-to-end connection is the best means of access to RT-delivered DSL-capable loops.
 - As with all **UNEs**, the question of how to price those loops is the proper purview of the state commissions, with guidance from the FCC on how to apply TELRIC.



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BOC arguments for scaling back of RT collocation and sub-loop unbundling must be considered together with the adoption of the Broadband UNE

- BOCs are asking the Commission to eliminate RT collocation and sub-loop UNEs in order to insulate their 'new investment' against unbundling.
 - The Commission has concluded since 1996 that all loops, including loops delivered through RTs, are bottleneck facilities that cannot be duplicated by competitors. Nothing on the record in this proceeding challenges that finding.
- BOCs are willing to sell a "broadband service" to CLECs through RTs -- see, e.g., Project Pronto and PARTS. Thus, the question is not whether RT-delivered loops should be unbundled -- it is the proper price for attached electronics.
- Tariffed offerings are no substitutes for UNEs. Congress did not intend that ILECs escape their loop unbundling obligations by offering tariffed access services, which are not subject to nondiscrimination obligations and can be withdrawn.

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How to address *USTA v. FCC*?

- Loops are bottleneck facilities, and only through ubiquitous unbundling of loops can any facilities-based local competition take hold.
- The Commission's decision to base unbundling of loops on the material the loops are made of would "technically redline" consumers by denying access to competitive services to any consumer with the misfortune to have a loop with fiber in it.
- BOC use of fiber in the loop, or upgrade to line card in an RT, is simply minor modification to a bottleneck facility, and does not mean that CLECs can now build their own loops.
- Any electronic attachments to the loop are part of the "features, functions, and capabilities" of that loop, and therefore must be unbundled together with the loop. If the pricing is done properly by the states, guided by the FCC, the ILECs will be fully compensated for their loop plant investment.



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Interoffice Transport

Overview -- Interoffice Transport

- True interoffice transport is part of the bottleneck transmission grid, just like loops.
- The Commission's findings as to interoffice transport in the *UNE Remand Order* are still valid.
- ILECs own "Fact Report" shows that 86% of ILEC COs have no competitive fiber provider collocated.
- ILECs provide not a *single example* of a true interoffice transport route that is actually served by CLEC transport.
 - The only data provided by ILECs is whether there is a collocated fiber CLEC -- no indication as to where the fiber goes. Most likely, to downtown office buildings, not to other central offices. This is the fundamental flaw in the BellSouth/TWTC proposal.
- ILECs are confusing the issue between fiber loops and interoffice transport in order to sell more special access services.
- Determination of competitive interoffice transport is fact-specific and route-specific inquiry.
 - Where does the fiber go? Is it available to third parties?



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Covad's network is dependent on interoffice transport

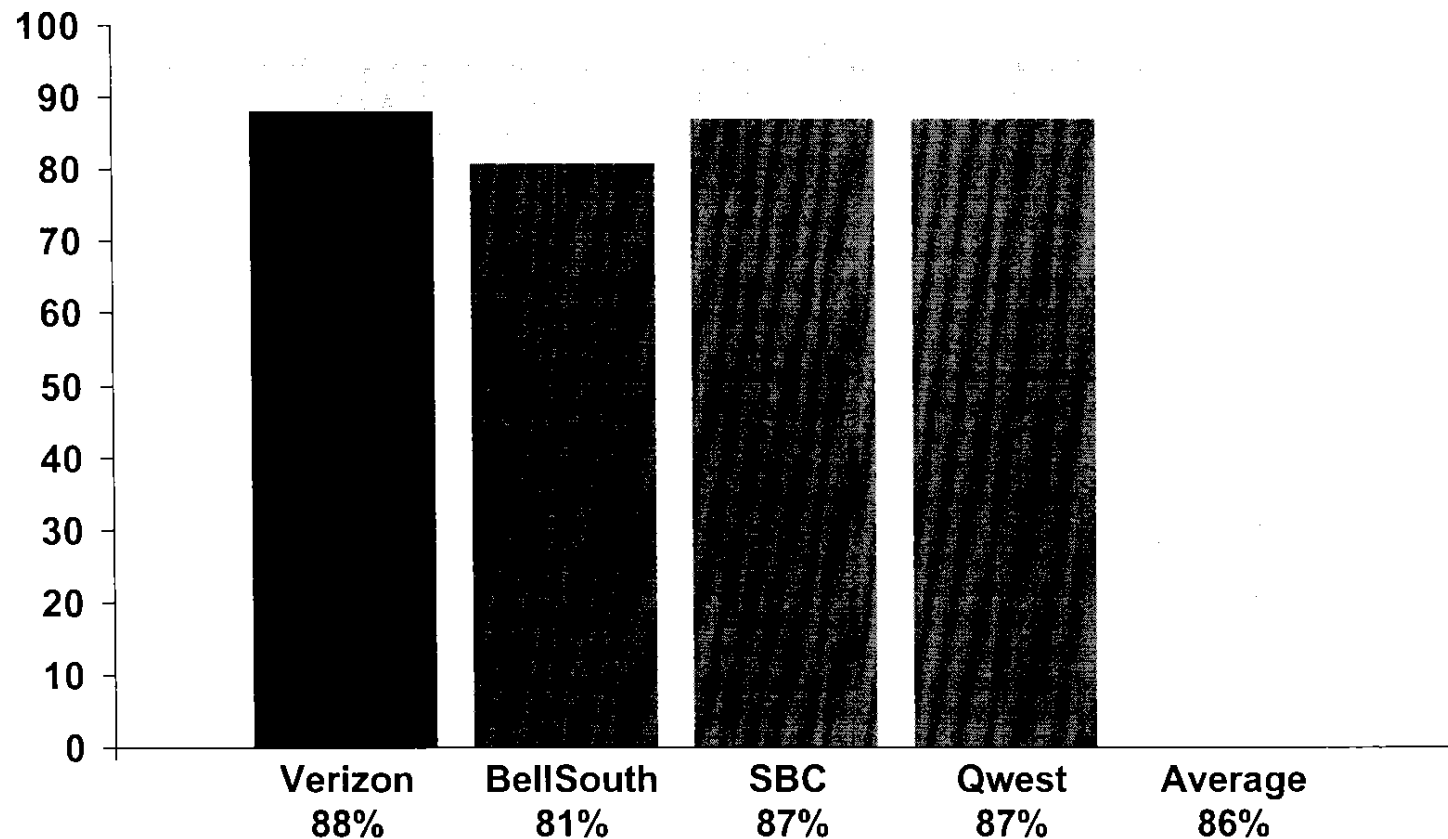
- Covad's ATM backbone network is the second largest ATM network in the country (only AT&T's is larger).
 - Covad runs two interoffice transport networks: Telemetry (network management) and production (customer data).
 - Requires access to DS-1 *and* DS-3 interoffice transport from *every* central office in which Covad is collocated (>1800 nationwide).
- Covad's network of collocated COs requires interoffice transport between all COs in the market -- one or two gaps, and Covad's network shuts down. Such transport is not available from CLECs.
- If CLEC interoffice transport were available, Covad would use it, rather than rely on the ILEC. As the record demonstrates conclusively, it is not available.
- Facilities based competition (CLECs purchasing ATM switches, IP routers) is the Commission's goal, and Covad is doing exactly that. Interoffice transmission grid cannot be (and should not be, from an economic efficiency standpoint) duplicated by CLECs. Congress intended unbundling of the transmission grid.

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Percentage of ILEC COs without a single competitive fiber provider collocated

Source: UNE "Fact" Report at III-2.



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How to address *USTA v. FCC*?

- No evidence on the record to support elimination of interoffice transport at this time as to any specific routes.
- DOJ HHI analysis provides a benchmark for future route-specific analysis of transport routes, which is what the *USTA* court suggested.
 - **Even the BOCs support use of HHI. See BellSouth Taylor decl. at 66; Qwest, Att. B, Strategic Policy Research at 5 n. 11.**
- Marketplace certainty is paramount -- existing interoffice transport network must remain in place for at least 24 months. Commission must provide certainty that ILECs will not flood regulators with petitions to eliminate routes until those routes are actually fully competitive. Burden of proof on ILEC.
- FCC must require at minimum a 24 month transition period for CLECs to obtain transmission capabilities if ILEC UNE transport is no longer available. At end of 24 months, ILEC must still provide transport, but at commercial rates no greater than special access.
- “Available” interoffice transport must take account of viability of transport provider, blanket coverage in a geographic area (CLECs cannot use multiple transport providers in different COs in the same geographic market), availability of access to transport loop links.



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